Competency Standards

Introduction

The Australian and New Zealand College of Perfusionists (ANZCP) has developed these competency standards for the clinical perfusion profession.

The purpose of the ANZCP *Competency Standards for Clinical Perfusionists* is to establish the minimum knowledge, skills and professional attributes that are needed to safely and competently practise as a clinical perfusionist in Australia.

The ANZCP's requirements for certification of clinical perfusionists[i] refer to these competency standards. The ANZCP uses the *Competency Standards for Clinical Perfusionists* as a reference point for determining a threshold of competence when assessing an applicant for ANZCP certification as a clinical perfusionist.

These competency standards are also intended to be used as the basis for assessing those seeking to enter practice as a clinical perfusionist in Australia, including for the assessment of:

- Australian trained and qualified clinical perfusionists
- overseas qualified clinical perfusionists
- clinical perfusionists who are returning to practice after a break.

The competency standards may also be used:

- by universities for the development of clinical perfusion curricula
- to communicate to the public, consumers, employers and other stakeholders the standards they can expect of a clinical perfusionist
- by practitioners for self-assessment of their competence and by employers for performance assessment or performance management in the workplace.

How the competency standards were developed

Framing of the core domains and key competencies in this document was informed by a comparative review of similar documents that describe the knowledge, skills, professional attributes and competencies for registered and non-registered health professions in Australia.

This document draws extensively from the Medical Radiation Practice Board of Australia's *Professional capabilities for medical radiation practice* (2020) and the Australian Orthotic and Prosthetic Association's *Entry Level Competency Standards for Orthotists/Prosthetists.*

Format of the competency standards

These competency standards are organised into five domains, each with corresponding key competencies (what clinical perfusionists must be able to do) and enabling components (evidence of the competency in

[1] ANZCP Certification Policy, available at https://anzcp.org/professional-standards/

practice). Together, the key competencies and enabling components describe the knowledge, skills and professional attributes necessary for safe and competent clinical perfusion practice.

Domains

The five domains are succinctly worded statements of the major work roles of the clinical perfusion profession. Each domain consists of key competencies that are thematically arranged and describe the essential characteristics of a competent clinical perfusionist in Australia.

Domain 1: Provision of clinical care

Domain 2: Communication and collaboration

Domain 3: Professional and ethical conduct

Domain 4: Evidence-informed practice

Domain 5: Safety and risk management

Key competencies – what clinical perfusionists must be able to do

The key competencies describe the main features of safe and competent practice in a range of contexts and situations of varied complexity and uncertainty. Any one procedure will require the clinical perfusionist to demonstrate competencies from various domains. This recognises that competent professional practice is more than a sum of tasks or procedures and needs an ability to draw on and integrate the breadth of competencies to support overall performance.

Enabling components – evidence of the key competencies for practice as a clinical perfusionist

The enabling components describe the essential and measurable characteristics of each key competency and facilitate assessment of performance in the practice setting.

The enabling components refer to different ways of demonstrating competence:

- **Apply knowledge/principles of –** where the clinical perfusionist is expected to apply detailed knowledge in the practice setting
- **Understand –** where the clinical perfusionist is expected to apply broad knowledge and understanding of information for safe practice, but may not need to understand or interpret detailed information or use their knowledge and understanding to perform certain procedures
- **Operate/perform/identify/respond –** where the clinical perfusionist is expected to demonstrate the ability in the practice setting.
- **apply knowledge** – used for specific areas of clinical perfusion where a practitioner needs detailed knowledge that can be applied. These are the ‘doing’ elements.

Competency standards and the accreditation of clinical perfusion courses

The Australian and New Zealand Board of Perfusion (ANZBP) is responsible for assessing and accrediting entry-level course of study in clinical perfusion. It assesses courses against the ANZCP *Course accreditation standards for clinical perfusion*. The accreditation standards refer to these competency standards, requiring education providers to design and implement courses where learning outcomes and assessment tasks are mapped to all the key competencies. Accreditation of a course therefore provides assurance that graduating students from a clinical perfusion course of study have the knowledge, skills and professional attributes necessary for safe and competent practice.

Assessment of competence

These competency standards provide evidence of what constitutes appropriate professional conduct or practice for the clinical perfusion profession. They provide a consistent reference point for assessing an individual's performance in the context of practice.

These competency standards are not designed as a stand-alone means of measuring competence. However, the document provides a resource to assist in framing additional performance indicators and rating scales for valid measurement of a clinical perfusionist or student's performance for different purposes, in different settings and across different scopes of practice.

Maintenance of professional competence

These competency standards are relevant throughout a clinical perfusionist's career. Certified clinical perfusionists need to maintain at least the threshold level of professional competence in all areas relevant to their practice and maintain the currency of their skills and knowledge through continuing professional development (CPD).

The level of professional competence and scope of practice of clinical perfusionists are likely to change over time as the profession advances and new roles emerge. With changes to scope of practice, some key competencies may no longer be relevant to a clinical perfusionist's practice.

Review

This document will be reviewed no less than five years from the date in the document footer (and no less than every 5 years thereafter), and whenever:

- significant changes to the role of the clinical perfusion profession occurs;
- where Competency Standards are thought to no longer be reflective of current practice; or
- evidence exists that certified practitioners are not performing safe and effective care.

References

Australian Orthotic and Prosthetic Association Pty (AOPA). *Entry Level Competency Standards for Australian Orthotists/Prosthetists* (2014). 3rd Edition.

Medical Radiation Practice Board of Australia (2020). *Professional capabilities for medical radiation practice*.

Domain 1: Provision of clinical care

This domain covers the knowledge, skills and attributes a clinical perfusionist needs to practise as a member of the health care team, to develop and manage patient-specific perfusion plans and to safely operate perfusion equipment and instrumentation, to provide safe, high quality, patient-centred care.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
1. Collect, analyse and interpret patient information relevant to planning and clinical decision-making	a. Collect or review written and/or verbal patient history and obtain necessary data to prepare a clinically appropriate patient-specific perfusion plan. b. Apply tables/calculations to correctly perform perfusion calculations including BMI, BSA, flow calculations, cannulae sizing. c. Access and use evidence to guide and assist with clinical decision-making. d. Identify risk factors or conditions that may affect the patient's capacity to undergo the procedure. e. Complete accurate perfusion data management entries.
2. Apply knowledge of biomedical and physical sciences and pump and perfusion technology in planning and clinical decision-making	a. Apply knowledge of anatomy, physiology, pathophysiology, biochemistry hematology, pharmacology and physics in planning and clinical decision-making. b. Identify anatomical structures and physiological processes and diseases of the human body relevant to perfusion practice. c. Apply knowledge for patient preparation requirements. d. Select the appropriate pump and perfusion technology and other equipment and instrumentation relevant to the patient care plan. e. Identify contraindications and limitations to determine appropriate adjustments to procedures.
3. Use clinical information management systems appropriately	a. Understand and comply with legislative responsibilities about data privacy, the ownership, storage, retention and destruction of patient records and other practice documentation. b. Use clinical information management systems to accurately record patient details, obtain relevant data and prepare patient-specific plans. c. Ensure that stored clinical information is associated with the correct patient and treatment. d. Respond appropriately to data errors and/or system failures. e. Ensure clinical information is made available to the appropriate persons involved in the care of the patient. ***Understanding legislation*** may include relevant state and territory and/or federal legislation about privacy of data and the differences across states and territories.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
	Clinical information management systems may include but are not limited to electronic medical records (EMR). ***Responding to data errors and/or system failures*** includes troubleshooting and fixing errors where possible or reporting errors/failures to the systems administrator in a timely manner.
4. Assess the patient's capacity to receive care and prepare patient-specific perfusion plan	a. Perform patient assessment and examination in accordance with clinical protocols and procedures. b. Review patient history and pathology/catheter reports to identify patient preparation requirements. c. Consult effectively with surgeons and anaesthetists d. Apply knowledge of pump and perfusion technology in planning and clinical decision-making. e. Identify contraindications and limitations of perfusion services and determine appropriate adjustments to procedures. f. Respond to uncommon patient clinical presentations.
5. Select and set up appropriate perfusion-related equipment, instrumentation, drugs, fluids and consumables	a. Understand the patient's clinical history, referral and current medical information to confirm the patient-specific perfusion plan is appropriate. b. Adapt the perfusion plan to an individual patient considering available clinical information. c. Perform procedural and equipment safety checklists. ***Clinical history*** may include patient records, previous clinical services, information collected from patient prior to or during the procedure.
6. Deliver patient care	a. Apply knowledge of patient evaluation including review of patient history. b. Apply knowledge of appropriate set up including aseptic technique, prime component selection and completion of required checklists. c. Apply knowledge of initiation and control of procedure. d. Respond to changing patient parameters for myocardial protection, cerebral perfusion, haemofiltration/MUF/dialysis and deep hypothermic circulatory arrest. e. Recognise patients whose condition is deteriorating and respond to their needs in an appropriate and timely way consistent with standards of safe and high-quality care.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
	f. Take appropriate and timely action to ensure the immediate management of the patient where another member of the patient care team identifies any urgent or unexpected findings. g. Record patient information and perfusion interventions. h. Apply knowledge and skills to assist with transport of patients requiring cardiopulmonary support. i. Understand knowledge and skills required to respond to emergency situations including massive air embolus, pump failure, power failure and oxygenator/reservoir changeout. j. Apply knowledge of post procedure for circuit disassembly and disposal, completion of required checklists and equipment readiness for next procedure. ***Recognising and responding to a patient's deteriorating condition*** must be interpreted in the context of the Australian Commission on Safety and Quality in Healthcare National consensus statement: essential elements for recognising and responding to clinical deterioration (National Consensus Statement) and the National Safety and Quality Health Service's (NSQHS) – Standard 8 Recognising and Responding to Acute Deterioration. These documents help practitioners to recognise patients whose condition is deteriorating and to respond to patient needs in an appropriate and timely way as essential components of safe and high-quality care. The National Consensus Statement also identifies that recognition of and response to deterioration requires practitioners who are appropriately trained. ***Taking appropriate and timely action*** is a key responsibility throughout the entire perfusion management process, including set-up of equipment and during post-operative care. ***Identifying urgent and unexpected findings*** includes recognising and applying knowledge of normal and abnormal presentations and relating these to the patient's clinical history.
7. Prepare, assemble, operate and maintain perfusion equipment and instrumentation	a. Apply knowledge and skills to prepare and operate heart-lung machine and extracorporeal circuit for safe conduct of cardiopulmonary bypass. b. Apply knowledge and skills to operate, maintain and test Heater Cooler Devices (HCDs) for regulation of patient blood temperature during cardiac surgery, including Heating Units for Extracorporeal Membrane Oxygenation. c. Apply knowledge and skills to safely prepare and operate Intra-Aortic Balloon Pump (IABP) for cardiac support. d. Apply knowledge and skills to safely prepare and use Cardioplegic solutions and Cardioplegic devices. e. Apply knowledge and skills to prepare and use Point of Care (POCT) devices to enhance safety during Extracorporeal Technology.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
	a. Apply knowledge and skills to prepare and initiate ECMO and Ventricular Assist Devices.
8. Deliver patient care in accordance with perfusion standards and guidelines	a. Apply knowledge and skills to operate: i. blood pumps ii. oxygenators iii. gas delivery and analysing devices iv. temperature control equipment v. safety devices vi. Vacuum Assist Venous Drainage devices (VAVD). b. Apply knowledge and skills to determine and administer pharmacological agents and solutions via the extracorporeal circuit. c. Apply knowledge and skills to operate and respond to in-line monitoring devices. d. Apply knowledge and skills to analyse data of haemodynamic devices. e. Apply knowledge and skills to: i. monitor reservoirs and filters ii. monitor and respond to cerebral monitoring devices, blood analysis and coagulation analysis results. f. Apply knowledge and skills to handle, store and administer blood products and derivatives and operate Autologous blood processing devices. g. Apply knowledge and skills to operate: i. Intra-Aortic Balloon Pumps (IABPs) ii. Veno-arterial Extracorporeal Membrane Oxygenation (VA ECMO) iii. Veno-venous Extracorporeal Membrane Oxygenation (VV ECMO), and iv. Ventricular Assist Devices (VADs). h. Apply knowledge and skills to operate equipment for minimally invasive cardiac surgery. i. Apply technical knowledge and skills to support the implementation and management of: i. hypothermia

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
	ii. circulatory arrest iii. cerebral perfusion.
9. Deliver safe and effective administration of pharmaceutical drugs	a. Apply the principles of safe and effective use of pharmaceutical drugs to perfusion practice, in accordance with relevant legislation and departmental perfusion guidelines. b. Recognise the risks, precautions and contraindications of the use of pharmaceutical drugs, informed by the patient's current pathology status. c. Apply knowledge of pharmacokinetics, pharmacodynamics and the potential range of reactions to medicines. d. Safely and effectively deliver pharmaceutical drugs to patients, in accordance with procedures. e. Actively monitor the effects of pharmaceutical drugs and manage adverse reactions, in accordance with protocols. ***Knowledge of safe and effective use of medicines*** relevant to practice may include state and territory and/or federal legislation about the supply and administration of medicines. It also includes understanding how pathological conditions may affect the delivery of some pharmaceutical drugs. ***Procedures for safe and effective delivery of medicines*** must be consistent with the NSQHS's Medication Safety Standard and may include checking products, confirming correct labelling, accurate calculations and measurements and correct route.

Domain 2: Communication and collaboration

This domain covers the clinical perfusionist's responsibility to communicate clearly, effectively and appropriately with patients and to work effectively with other health practitioners, to provide safe, high quality, evidence-informed and patient-centred care.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
1. Communicate clearly, sensitively and effectively with patients, in accordance with the perfusionist's role in the patient care team	a. Establish rapport with the patient (and at times beyond the patient) and communicate effectively to collect and convey information about the proposed care or treatment. b. Convey knowledge and procedural information in ways that create trust and confidence and respect the patient's confidentiality, privacy and dignity. c. Respond to patient queries or issues, identify likely communication barriers specific to individual patients and implement strategies to avoid or overcome them. d. Make appropriate adjustments to communication style to suit the particular needs of the patient including Aboriginal and Torres Strait Islander Peoples and those from culturally and linguistically diverse backgrounds. e. Make provision to engage third parties to facilitate effective communication when needed. f. Ensure informed consent has been obtained and the purpose, risks and benefits of the care or treatment have been explained. ***Communication barriers*** may arise because the clinical perfusionist's own culture and experience affect their interpersonal style, or because of the patient's or family's/carer's culture and experience. The patient's or family's/carer's capacity to understand may be influenced by English language skills, health literacy, age and health status. ***Communication beyond patient*** may include with family, significant others, carers, interpreters, legal guardians and medical advocates. ***Effective communication*** includes active listening, use of appropriate language and detail, use of appropriate verbal and non-verbal cues and confirming that the other person has understood. ***Informed consent*** is a person's voluntary decision about healthcare that is made with knowledge and understanding of the benefits and risks involved. (see the NSQHS Standards for further guidance).

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
2. Collaborate with other healthcare workers and work effectively as part of a multidisciplinary patient care team	a. Establish and maintain effective and respectful working relationships with members of the patient care team and other health practitioners. b. Understand, acknowledge and respect the roles and responsibilities of other members of the patient care team and work effectively and collaboratively to deliver safe and competent patient care. c. Follow accepted protocols and procedures to provide relevant and timely verbal and written communication. d. Make recommendations to other members of the patient care team about the suitability and application of the proposed clinical perfusion procedures, when appropriate. e. Identify and respond to factors that facilitate or hinder constructive working relationships in the patient care team. f. Invite, act upon and offer constructive feedback on practice with or from colleagues. ***Patient care team members*** may include registered health practitioners, accredited health professionals, and registered and non-registered healthcare workers. ***Making recommendations about the suitability and application of procedures*** requires understanding of the relative risks and benefits to patients of each procedure used and effective collaboration with other members of the patient care team. ***Communication methods*** must consider the information needs of the audience and may include the clinical perfusionist using the technical terminology appropriate to their role and applying knowledge of departmental/practice protocols.

Domain 3: Professional and ethical conduct

This domain covers the clinical perfusionist's responsibility and commitment to act in a professional and ethical manner and to practise within the current medico-legal framework, for the health and wellbeing of their patients and the community. It addresses their responsibility to ensure that patient confidentiality and privacy is maintained at all times, while recognising the potential need to act as patient advocate.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
1. Practise in an ethical and professional manner, consistent with relevant legislation and regulatory requirements	a. Understand and comply with legal obligations and workplace guidelines relating to safety. b. Manage personal, mental and physical health to ensure fitness to practice. c. Understand mandatory reporting obligations under the applicable state or territory Code of Conduct for non-registered health care workers and the professional obligation to report unprofessional conduct by other health practitioners. d. Apply the ANZCP *Code of Conduct* to practice. e. Provide relevant information to the patient and ensure proper procedures are followed to obtain informed consent. f. Apply the basic principles underpinning bio-ethics in clinical perfusion practice and recognize and respond appropriately to ethical issues encountered in practice. g. Exercise appropriate levels of autonomy and professional judgement in the context of team-based practice. ***Legal responsibilities*** may include an understanding of responsibilities contained in relevant state/territory and federal legislation and regulations, specific responsibilities to maintain confidentiality, confirm informed consent and exercising duty of care. ***Principles underpinning bio-ethics*** include respecting the rights and acting in the best interests of others, respecting the autonomy of the individual, causing no harm and advancing the common good. ***Relevant patient information*** includes information such as clinical history, comorbidities, drug allergies, and patient size (height & weight). ***Relevant aspects of the Australian health care system*** may include knowledge of service provision arrangements, the relevant state or territory medicines regulation authorities. ***Key elements of fitness to practise*** include competence, professionalism, including a sense of responsibility and accountability, self-awareness and professional values, sound mental health and the capacity to maintain health and wellbeing for practice. ***Reporting obligations*** may include reporting poor practice to a clinical supervisor, lodging a complaint with the responsible state or territory health complaints entity (non-registered health care workers), or making a notification about the health (impairment), conduct or performance of a

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
	registered health practitioner who may be placing the public at risk (registered health practitioners).
2. Treat each patient with respect, dignity and care	a. Recognise and evaluate the socio-cultural factors that may influence patient attitudes and responses to health care services. b. Apply the principles of cultural competence and culturally safe care to practice. c. Display appropriate professional behaviour in patient interactions. d. Identify and respect appropriate boundaries between patients and health professionals. ***Socio-cultural factors*** may include but are not limited to cultural and linguistic diversity, age, gender, disability, religion, socio-economic, geographic locations and identifying as Aboriginal and/or Torres Strait Islander Peoples. ***Cultural competence*** is defined as a set of congruent behaviours, attitudes, and policies that come together in a system, agency, or among professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations. The word 'culture' is used because it implies the integrated pattern of human behaviour that includes thoughts, communications, actions, customs, beliefs, values and institutions of a racial, ethnic, religious or social group. The word 'competence' is used because it implies having the capacity to function effectively. A culturally competent system of care acknowledges and incorporates – at all levels – the importance of culture, the assessment of cross-cultural relations, vigilance towards the dynamics that result from cultural differences, the expansion of cultural knowledge and the adaptation of services to meet culturally-unique needs. ***Culturally safe care*** requires a combination of individual and institutional knowledge, skills, attitudes and competencies to deliver optimal healthcare for Aboriginal and Torres Strait Islander Peoples. ***Appropriate behaviour*** includes behaviour that is non-discriminatory, empathetic and respects socio-cultural differences.
3. Take responsibility and accountability for professional decisions about patient care	a. Make appropriate professional decisions about the care of patients, within the context of collaborative team-based care. b. Recognise the boundaries and limits of the clinical perfusion role and scope of practice and seek assistance when beyond knowledge base or level of competence. c. Recognise and respond appropriately to unsafe or unprofessional practice or when the patient is at risk. d. Integrate organisational policies and guidelines with professional standards and apply these to practice.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
4. Advocate on behalf of the patient, when appropriate	a. Support and promote the rights and interests of patients and support them to represent their own interests, when appropriate. b. Recognise when it may be appropriate to intervene on behalf of the patient. c. Advise other members of the patient care team about alternative suitability and application of the proposed patient-specific perfusion plan, when appropriate.
5. Seek opportunities to progress the profession	a. Participate in peer assessment, standard setting, mentorship and provide developmental support to other clinical perfusionists and other members of the patient care team. b. Use appropriate strategies to effectively supervise students in the work environment and deliver feedback (verbal and written) to the student and the education provider on their performance.

Domain 4: Evidence-informed practice and professional learning

This domain covers the clinical perfusionist's responsibility to engage in evidence-informed practice and to critically monitor their actions through a range of reflective processes. It also addresses their responsibility to identify, plan for and implement professional development to meet their ongoing professional learning needs.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
1. Resolve challenges through the application of critical thinking and reflective practice	a. Identify the challenge or question and the information that is needed to respond. b. Find, critically appraise, interpret and apply best available research evidence to inform clinical reasoning and professional decision-making. c. Provide evidence-informed patient-centred care by carefully considering the purpose of the clinical treatment, reviewing existing protocols, methods and equipment, reflecting on clinical challenges or experiences and integrating knowledge and findings into practice. d. Recognise opportunities to contribute to the development of new knowledge through research and enquiry. ***Challenges or questions*** are not limited to clinical challenges or questions. Clinical perfusionists are expected to identify and seek a solution for any challenge or question they encounter in professional practice. ***Best available research evidence*** is credible information from valid and clinically relevant research conducted using sound methodology. ***Recognise opportunities to contribute to the development of new knowledge*** requires a practitioner to have a basic understanding of research design, methodology, analysis, review and publication steps in the research pathway. ***Reflective practice*** may include self-reflection during and after a clinical challenge or experience. It may involve structured and informal reflection to review and integrate knowledge and findings into practice.
2. Identify ongoing professional learning needs and opportunities	a. Comply with professional responsibilities to complete CPD. b. Critically reflect on own strengths and limitations to identify learning needed to improve and adapt professional practice. c. Seek input from others to confirm own learning needs to enhance the quality of patient care. d. Plan and implement steps to address professional learning and development needs. e. Share skills and knowledge with and offer constructive feedback and assistance to colleagues and students. ***Professional development*** may be provided by the professional community and the broader healthcare network/practice.

Domain 5: Safety and risk management

This domain covers the responsibility of clinical perfusionists to protect patients, others and the environment from harm by managing and responding to the risks inherent in perfusion practice. It also addresses the responsibility for providing safe, effective and high-quality professional services, for the benefit of patients, their families or carers and the patient care team.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
1. Perform and provide safe perfusion practice	a. Practice in accordance with relevant legislation, perfusion guidelines and international best practice in perfusion management. b. Apply knowledge of aseptic and sterile techniques to ensure safe perfusion practice and maintain optimal operating theatre hygiene. c. Apply knowledge of risks associated with use of pharmaceutical drugs and solutions. d. Apply principles of risk management relevant to perfusion practice. e. Identify perfusion risks and implement effective and appropriate risk related risk control systems and procedures. f. Review and update the patient-specific perfusion plan to ensure responsive and appropriate care. g. Recognise and report on near misses and their consequences, in addition to adverse events and relevant contributing factors. ***Safe perfusion practice*** requires the practitioner to carefully consider the specific patient needs in the context of the procedure and practice with the intention to deliver the best outcomes to the patient. ***Risk control*** must include an understanding of principles of relevant quality assurance frameworks and application to risk management. ***Relevant legislation and guidelines*** includes all legislation and guidelines in the jurisdiction of practice, as applying to perfusion. In some jurisdictions this will include requirements to operate within a statutory code of conduct (e.g. in NSW, Code of Conduct for Unregistered Health Practitioners and Health Organisations[1] under the *Public Health Regulation* 2022 (NSW)), and on administration of drugs and medicines by perfusionists (e.g. *Medicines and Poisons Act 2019* (Qld)[2] and the *Medicines and Poisons (Medicines) Regulation 2021* (Qld))[3]. ***Risk management*** includes an understanding of relevant quality assurance frameworks and their application to practice. Justification

[1] https://www.health.nsw.gov.au/phact/Pages/code-of-conduct.aspx, accessed on 21 August 2023.
[2] https://www.legislation.qld.gov.au/view/html/inforce/current/act-2019-026, accessed on 21 August 2023.
[3] https://www.legislation.qld.gov.au/view/html/inforce/current/sl-2021-0140, accessed on 21 August 2023.

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
	involves assessing whether more good than harm results from a perfusion procedure. ***Limitation*** involves setting dose limits, or imposing other measures, so that the health risks to any person undergoing perfusion are within an acceptable range having regard to safety, quality and treatment effectiveness. ***Optimisation*** involves minimising health risks to any person.
2. Protect and enhance patient safety	a. Follow patient identification procedures to confirm the correct match of the patient with the intended procedure and the correct anatomical site. b. Review, communicate, record and manage patient information accurately, consistent with protocols, procedures and legislative requirements for maintaining patient records. c. Identify and manage risks associated with patient transfers. d. Identify and manage risk of infection, including during aseptic procedures. e. Apply relevant quality assurance frameworks to evaluate and audit perfusion processes and outcomes. f. Participate in the development, implementation and review of institutional and departmental policies, procedures and protocols relevant to the clinical care of patients. ***Infection control risk management*** must demonstrate understanding of transmission modes of hospital-acquired infections (host, agent and environment); established practices for preventing the transmission including effective hand hygiene; and ability to implement NHMRC infection prevention and control guidelines.[4] ***Patient information management*** must comply with confidentiality and privacy. The practitioner must demonstrate awareness of the legislative requirements about ownership, storage, retention and destruction of patient records and other practice documentation. ***Patient identification procedures*** must use at least three recognised patient identifiers and may include procedures for transferring patients from other health professionals. Procedures may be contained in national protocols published by the Australian Commission on Safety and Quality in Health Care (ACSQHC), relevant state and territory or federal guidance and workplace materials. ***Infection control risk management*** includes managing transmission modes of hospital acquired infections (host, agent and environment), preventing transmission (including effective hand hygiene) and implementing National Health and Medical Research

[4] *Australian guidelines for the prevention and control of infection in healthcare* (2010)

What clinical perfusionists must be able to do	Evidence of this competency for practice as a clinical perfusionist
	Council's (NHMRC) Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019 guidelines). ***Quality frameworks*** may include workplace specific frameworks, relevant jurisdictional publications and frameworks relevant to the context of practice such as the Australian Safety and Quality Framework for Health Care published by the ACSQHC.
3. Implement quality assurance processes to ensure perfusion related equipment and instrumentation are operational and fit for purpose	a. Check and confirm that all equipment and instrumentation is in good order and operating within acceptable parameters. b. Follow protocols to record details of all routine equipment and instrumentation checks. c. Identify and take appropriate action to correct unacceptable condition or operation of all equipment and instrumentation. d. Follow protocols to record and report non-conformance of all equipment and instrumentation. ***Equipment*** includes all main equipment and accessory equipment (instruments) used to provide perfusion management of a patient. ***Good order*** may be achieved by following cleaning and hygiene protocols, calibration/ testing regimes and acceptable operating standards. Issues affecting the functioning of equipment must be fully resolved before treating patients.
4. Maintain safety of the workplace	a. Demonstrate knowledge of legal responsibilities for health and safety of self and others. b. Identify safety hazards in the workplace and respond to incidents in a timely and appropriate manner, in accordance with protocols and procedures. c. Store and handle biohazardous materials in accordance with protocols including appropriate use of personal protective clothing and equipment. d. Document and report on all incidents in accordance with protocols and legal responsibilities. e. Apply knowledge of pharmaceutical drug interactions and adverse reactions. ***Responsibilities for notification of safety hazards*** may include protocols or instructions, legislation and regulations. ***Incident reporting requirements*** may be identified in protocols and procedures and workplace materials and may include legal requirements identified in the relevant state and territory or federal legislation and regulations.